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ABSTRACT

Historically, bibliographical classification and indexing systems have concentrated on textually-based materials. More recently, archives and libraries have realized a pressing need to provide access to visual documents. An institution like the Ohio Historical Society must consider many different tools of access to achieve this goal. The growth of the Internet makes it an attractive conduit for providing access via an electronic index of bibliographical surrogates of the collection. The heart of the index is the bibliographical record. If the search terms selected by the researcher do not match the terms selected by the indexer, the index is a failure. This study addresses methods of anticipating the language and needs of an index's future users by charting and analyzing past information requests. It also examines the different sources available for generating the controlled vocabulary and bibliographic record format for image collections. Finally, it describes the creation and testing of an electronic index by four Ohio Historical Society staff researchers. Findings include: the majority of reference requests are very specific; the subject headings of the "Library of Congress Thesaurus for Graphic Materials" are the most appropriate for this collection; and the best model for the bibliographic record is the Library of Congress record. Several modifications of these records proved appropriate in the areas of field names and the level of specificity of subject headings. Appendices include reference and information-only requests from July 1995-May 1997, sample records, and a bibliography of Civil War Ohio reference books. (Contains 28 references.) (Author/SWC)

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ED 412 988

A PROTOTYPE ITEM-LEVEL INDEX TO THE CIVIL WAR PHOTOGRAPH COLLECTION OF THE OHIO HISTORICAL SOCIETY

A Master's Research Paper submitted to the
Kent State University School of Library and Information Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Eric T. Davis

August, 1997

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Master's Research Paper by

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Historically, bibliographical classification and indexing systems have concentrated on textually-based materials. More recently, archives and libraries have realized a pressing need to provide intellectual and physical access to visual documents. An institution like the Ohio Historical Society must consider many different tools of access to achieve this goal. The growth of the Internet makes it an attractive conduit for providing access via an electronic index of bibliographical surrogates of the collection. The heart of the index of the bibliographical record. If the search terms selected by the researcher do not match the terms selected by the indexer, the index is a failure. This study addressed methods of anticipating the language and needs of its future users by charting and analyzing past information requests. It also examined the different sources available for generating the controlled vocabulary and bibliographic record format for image collections. Finally, an electronic index was generated and tested by four Ohio Historical Society staff researchers. It was found that the majority of reference requests are very specific, the subject headings of the Library of Congress Thesaurus for Graphic Materials are the most appropriate for this collection, and the best model for the bibliographic record is the Library of Congress record. Several modifications of these records proved appropriate in the areas of field names and the level of specificity of subject headings.

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CHAPTER I.

INTRODUCTION

Mankind's first attempt to communicate beyond his life was with a picture - not a word. The use of pictograms was common practice eons before written language. "In short, the first statements to survive the sound of a voice were pictures, not words" (Taylor 1979, 418). It is not surprising that our oldest surviving human records are pictures: the cave art Lascaux, France and Altamira, Spain. These depictions of horses, bulls, and other animals precede the invention of the first alphabet, cuneiform, by at least ten thousand years (Encarta 1996), and speak volumes about their creators.

> No other kind of relic or text from the past can offer such a direct testimony about the world which surrounded other people at other times. In this respect, images are more precise and richer than literature. (Berger, 1976, 10)

The synthesis of written language and pictorial representation provides the most complete understanding of an age or an idea. Pictures convey information in different ways than text, and they convey an entirely different type of information (Layne, 1994). The combination of texts and images appeals to "all of the human senses through both sides of the brain" (Taylor, 1979, 419). The synthesis of these two modes of human communication yields an understanding that is greater than the sum of both. "Only when photographic records are used in conjunction with textual documents is it possible to understand the entire story of an event or scene" (Tolppanen, 1996, 3).

The archival value of image collections is separate but equal to manuscripts, journals, letters and other primary source material, which are the traditional records preserved in archives. Essentially, archival materials must, "contain evidential and informational value; and that these materials are kept because of their *enduring research value*" (Greenberg, 1993, 86). Images are

valuable tools because they contain unique information that is not accessible in any other form (Tolppanen, 1996, 3). Historically, our library classification systems have concentrated on textual materials, while regarding visual materials as "works of art", most likely to be classified by art historians for their aesthetic, interpretive, or symbolic attributes. Consequently, systems of classification for visual materials as archival records have developed slowly. This attitude has changed radically over the last decade, as librarians, archivists, and information scientists began to focus more on providing intellectual and physical access to visual documents as archival records (Hahn, 1994, 3). The various tools for establishing bibliographic control of images will be the focus of this paper.

Over the past twenty-five years, the area of documentation of holdings has been identified as a critical area of concern for archives and historical societies like the Ohio Historical Society (OHS). Quite simply, this documentation should provide intellectual and physical access to any item in the collection. It should also be able to "shed further light on any object as required" (Reibel 1978, 24). Unfortunately, very few institutions can provide this type of access to even a fraction of their collection. This lack of available documentation, "is a handicap to adequate care and maintenance of these collections and to scholarly progress in general" (American Association for Museums, 1984, 53).

Similarly, access to the OHS photograph collections is less than adequate, and as a result, several schemes are being considered to greatly improve access for staff and public. Traditionally, bibliographical control is provided in the form of indexes, which serve as pointers to desired individual items or groupings of items. The OHS photograph collections, totaling more than one million images, are categorized in four separately-located groups. Each group is represented by

its own discrete index, none of which contain adequate cross-relational information to the other indexes. These four groups can be summarized in the following manner:

1. **The SC Collections**: This is the ready-reference collection, but it is not browsable by the public. It consists of 5500 legal sized folders of photographs arranged by subject; it is indexed by subject in its own card catalog. These folders contain from one to fifty images each.

2. **The P-Collections**: This large collection is really a collection of collections. It is stored in a closed stack area. It consists of 397 collections by donor, thus each group's provenance is retained. They range in size from approximately 50 to as many as 24,000 photographs. The surrogates for these collections are in the form of manual finding aids, arranged by collection name, not by subject. The P-Collections are also represented by an electronic database that offers searches by field. However, this database is currently not available to the public.

3. **Oversized Photograph Collection (OVS)**: This collection consists of images larger than legal size (8½" x 14") that will not fit into the folders for the SC or P-Collections. This collection is indexed by subject, and is interfiled with the manuscripts, in the manuscripts card file.

4. **Antique Photograph Collection (AP)**: This collection consists of photographs that are deemed valuable as artifacts, and consequently are housed seperately. This collection includes Ambrotypes, Daguerreotypes, Tintypes, and others. The AP Collection, which contains 1790 total items, is indexed in a separate AP card catalog, arranged sequentially by name, but not by subject.

A *brief search* for photographs can be easily performed by staff members or the public via the SC card file. A *comprehensive search* proves more problematical. A staff member is forced to search in each of the four indexes listed above. This is a labor-intensive process, and consequently is only rarely performed. For the library patron, a comprehensive search is difficult, because even though cards and finding aids are provided, the P-Collection's electronic database is off-limits to the public. In addition, very few researchers make use of the AP card file, as the documentation does not provide subject access.

Rationale for the Study

The major purpose of this study was to investigate the most appropriate method of providing intellectual and physical access to the composite Civil War image holdings of the Ohio Historical Society. All four of the above-mentioned collections contain Civil War photographs, which may be regarded as a sub-set of the entire photograph collection. The non inter-related nature of the four collection indexes presents an access problem in need of a single source collational index. The index type and construction was considered from the standpoint of both the OHS staff and researchers from the general public. The research skills and collection use of these two user groups was investigated in order to recommend the most effective instrument of bibliographical control in the areas of index type, bibliographical record construction, index terms, and controlled vocabulary.

Definition of Terms

Full-text index: an electronic index that contains pointers to every word and character in a database.

Web search engine: For searchable indexes (Z39.50), a Web search engine takes care of talking to the remote collection, submitting searches, and fetching and processing the results.

Antique photography: In the case of the Ohio Historical Society, graphic images that are valuable for study as artifacts due to their method of generation or production.

Finding aids: The chief source of information for archival materials; synonymous with a collection inventory; collections may be described at the item, folder, box or collection levels.

Thesaurus: A controlled vocabulary within a circumscribed subject field used to organize material or information. Consists of a syndetic structure that attempts to perform for the field in question the same function that conventional subject heading lists serve for the body of recorded knowledge. (UMDL, 1997)

Limitations of the Study

Because the special photograph collection being analyzed is more likely to be found in a large state historical society similar to the Ohio Historical Society, articles, model indexes, and model bibliographic records were selected with this type of large collection in mind. The reference requests that were charted are from the logs of the Ohio Historical Society, and as such will not necessarily be applicable to all photographic collections; for example, those typically found in public libraries, smaller archives, corporate libraries, or other special libraries.

CHAPTER II.

REVIEW OF THE LITERATURE

A photographic index serves many functions, but most importantly it can, "maintain control over a repository's holdings as well as to inform researchers" (Orbach 1990, 168). The index serves as an inventory of a defined sub-set of the collection, in this case Civil War images. It provides staff a tool to quickly assess the "size and scope of its holdings" (Orbach 1990, 168). In the acquisitions area, an index can provide the necessary information to target areas of need, or to avoid duplication of currently-held materials.

An index can also prove invaluable should the need arise to produce documentation for damaged or missing items. Many archives have been publically embarrassed when the need to provide descriptions of holdings has proven difficult or impossible to accomplish. As one author (Samuel 1988) sadly relates, "many museums have initiated documentation projects only after the loss of an important object with concomitant embarrassing publicity".

For the researcher, staff or public, the benefits of an electronic index are self-evident. At its most basic level, it must provide both intellectual and physical access to all items in a given collection. Access is the primary concern of archives because, "photographs are only worth preserving in an archives if they will eventually be utilized by researchers" (Tolppanen, 1996, 12). The ability to perform a comprehensive search of a collection from a single-source index is a critical element towards providing item-level access.

One institutional advantage to providing a graphic index is collection preservation. Whether the surrogates are text-only, or text combined with images, a distinct benefit is the decreased handling of the original images. Fingers are "more destructive than any chemical or

moisture phenomena" (Schwalberg, 1982, 85), so any procedure that limits handling of photographs is a sound preservation practice.

The objectives of an image index should be identical to the principles already established for subject control of all items, both textual and graphic. Charles Cutter (1904) defined these objectives as:

1. To enable a person to find a book of which...the subject is known
2. To show what the library has...on a given subject
3. Bringing books together which treat of the same subject specifically, and which treat of similar subjects

Thus, the goals of cataloging serve two quite different functions: to isolate a specific item, but also to group items by similar or related subjects. Current cataloging practices accomplish these seemingly antithetical goals through a combination of descriptive and subject cataloging. Generally speaking, the descriptive portions of a bibliographic record help to identify a specific item, while the subject portions help to group and combine items by subject. While the goals of an image index should not differ from Cutter's principles, the construction of its bibliographic records should be idiomatic for both graphic images and the specific collection being indexed.

Unique challenges to cataloging images

The cataloging of photographs presents several special challenges inherent to images. In the area of descriptive cataloging, photographs are often not self-identifying. Unlike textual works that provide such essential cataloging aids as title pages, abstracts, and tables of contents, photographs often contain no indication of author/photographer, names of persons or places depicted, dates, or any textual information whatever. As a result, the cataloger may be forced to research the item, or to interpolate details by considering the item in relation to the balance of its accession group, its "Respect de Fond". This archival concept states that, "...a group of records

in an accession...should be kept together regardless of the formats involved or the nature of the records" (Tolppanen I, 1997). Thus, the cataloger is aware of the content of the accession as a whole, and is free to draw conclusions drawn from the intellectual sum of its parts.

In the area of subject cataloging, the cataloger is challenged by the subjective nature of the intellectual elements of graphic collections. It is well-documented that little agreement exists between users or leven ibrary professionals in the choice subject terms for images (Collantes, 1995). Consequently, prediction of researcher/cataloger subject term selection is very difficult. It is axiomatic that the subject terms entered into the database/index by the cataloger must match the terms selected by the researcher. This match is the most critical method of evaluating the performance of an index. "An inconsistent, or otherwise poorly done effort will result in a confused retrieval system and a grossly underused photograph collection" (Tolppanen, 1997, 28).

The first step in any graphic index is the challenge of translating, condensing, and organizing visual information into written language (Tolppanen, 1997). Whether the index contains visual surrogates or not, the initial step for both cataloger and researcher alike is to represent visual concepts in textual form. Given that the two forms contain different types of information, this step presents a challenge to both parties.

Objective intellectual control has its own set of factors. An image's aesthetic and/or emotional appeal can affect the appraisal of the archival or intellectual qualities of a photograph (Greenberg, 1993). Graphic materials perceived as having informational value, were originally created for different purposes, known as their evidential value. Potential informational uses of these materials are as varied as the researchers that will use the index, and it is nearly impossible to anticipate, "all the reference questions that a given image might satisfy" (Benemann, 1994, 45).

Probably the most challenging question concerns the level of description, or specificity, assigned to an item. Three levels of description have been identified, ranging from concrete to symbolic (Panovsky, 1983). The first level, the primary level, describes specifically the physical objects within the image. It reveals what the picture contains, its "ofness". This level best satisfies information requests that are of an objective or factual nature, such as searches for individual persons, places, events or objects. The secondary level is concerned with interpreting the objects within the image in a cultural context, and can be summarized as representing what the image is "about". This level is more subjective, and, "is based on knowledge acquired from familiarity with the customs and cultural traditions of a particular civilization" (Leung, 1992, 112). Traditionally, this level has been used to catalog images in the field of art history, and requires that both the indexer and researcher have expert knowledge of the field. However, this level, when coupled with the primary level, can satisfy many types of requests because, "pictures are simultaneously generic and specific" (Shatford, 1986, 47). For example, an image *specifically* "of" Sergeant Adam Horine (110th O.V.I.), is also *generically* "about" an Ohio Civil War soldier, a Union Soldier, an example of a tin-type image, the uniform of a Union Sergeant in the Army of the Potomac in 1864, and a soldier with a battle-hardened visage, to name but a few. Panofsky's third level of deception, the iconological, is concerned with deep intrinsic or symbolic meaning, and, "cannot be indexed with any degree of consistency" (Hahn, 1994, 3), and is seldom included in indexes.

Index Facets

As previously stated, an index must provide both physical and intellectual control of the collection. The former includes the steps of acquisition, accession, and processing of each

collection. In order to establish physical control on an item-level, each image must be assigned a unique catalog number. This number is the necessary first step for creating an indexing, storage, and retrieval system, and should be written on the back of the item with a only soft granite pencil.

Once this physical control has been established, the intellectual control process can begin. The indexer must choose access points and vocabulary that are most likely to match the needs and skill level of its researchers. This is a critical and difficult task, and the solution is unique to each institution and each collection. The most appropriate method of prediction is that of charting past information requests within the institution.

An important facet for intellectual control of an image index is the choice of a controlled vocabulary for subject terms. The Library of Congress Subject Headings (LCSH) has traditionally offered intellectual control over archival material, albeit mostly of "textual, book-length materials" (Greenberg 1993, 89). But as the sophistication of image databases has grown, the limitations of LSCH as a subject list of visual materials have become apparent, and as one author (Greenberg, 1993) observes, "LCSH does not always provide terminology for the specific concepts that are represented in visual archives". As a result, two thesauri have subsequently been designed specifically for graphic materials: the Art and Architecture Thesaurus (AAT), and the Library of Congress Thesaurus for Graphic Materials (LCTGM).

The stated goal of the ATT is to construct an extensive controlled vocabulary for the disciplines of art and architecture, which is structured to meet the needs of the scholars and researchers in each field (Greenberg, 1993). This highly specialized source uses terminology that is familiar to a relatively specialized audience, and deals largely with Panovsky's second level of description, the culturally-based "aboutness" of an image. This level of description generally

excludes access to factual images elements, and also tends to exclude novice or casual users (Leung, 1992).

The LCTGM appears to be a much more appropriate choice of thesaurus for the OHS collection. It grew from the recognition of the limited nature of LCSH to satisfy the subject needs of pictorial materials. The stated goal of LCTGM is simply to, "promote standardization in image cataloging" (LCTGM, 1995, 13). This thesaurus was authored by The Library of Congress Prints and Photographs Division, and is structured towards a more general image collection than is the AAT. The major advantage of LCTGM for this institution is its ability to provide, "subject indexing to visual materials founds in libraries, historical societies, archives, and museums" (Greenberg, 1993, 95). The LCTGM is designed to provide guidance for both indexer and researcher, and is a pragmatic tool to facilitate subject term matching between the two. LCTGM is fully available online, suggesting that a searchable Web index created *from it*, should also contain a hyper-link to *it to*, as a reference aid to researchers. The fact that the Library of Congress has an extensive Civil War photograph collection that has helped shape this work, makes LCTGM a highly appropriate model for the OHS collection. It will supply subject heads for most items in the collection, and has the added benefit of being familiar to some experienced researchers that may have previous experience searching the Library of Congress indexes for similar items. Both the AAT and the LCTGM are based on LCSH, and most reports indicate that all three sources are necessary in the processing of large image collections.

Another choice to consider is that of the level of indexing to provide. Archival collections can be represented at the collection, box, folder, or item-levels. There exists is no clear-cut school of thought as to which level is most beneficial for each separate collection. This decision is

collection- and institution-specific, and must be made by the collection-processor. Generally, the highest level of detail should be provided for the collections that are the most requested. Also, the larger the collection, the greater the need for item-level control. Some advocate that all images collections, unlike textual records, must be controlled at the item level (Huyda, 1977). Many factors play into this decision, among them the, "size of the collection, historical importance, access restrictions, and potential research uses, as well as the financial support and staff time which is available" (Tolppanen, 1996, 23). The higher the level of detail, the more expensive the project, but these considerations must be weighed against future collection use and research time saved.

To provide item-level access to the cumulative body of Civil War photographs, rather than just the ready-reference collection, can literally pay-off financially. One recent research study (Tolppanen, 1997) concludes that,

> The substantial financial resources produced by photographs, the biggest money earner in the archives, can be used to improve the quality of the institution. Several institutions reported that the substantial profit obtained through the sale of photographs was sufficient for the institution to fund their conservation program or purchase such new items as microfilm readers.

This increased revenue can also provide funds for further improving access to the collection. As reference requests are filled, photographic negatives or digitally captured image files can be stored and retrieved to fill future requests. Needless to say, the labor required to produce the image is diminished with each successive request, and the revenue is generated at a reduced cost to the institution.

CHAPTER III.

METHODOLOGY

The popularity of the Civil War as a topic of research is increasing each year, and will undoubtedly continue to do so.

> The American Civil War continues to hold the attention of both historians and the general public. One needs only to consider the critical acclaim and viewer popularity of "The Civil War" which aired on public television in September 1990 to verify the war's continuing appeal (Rother, 1991, 2).

In addition, the number of Internet users is growing at the astounding rate of 10% per month (Chowdhury 1995), and shows no sign of decreasing. This combination of factors makes the creation of a searchable Web index of a high-use group of images such as this one, a sound idea.

In order to best meet the needs of the users of this index, a chart of user requests for items from the entire photograph collection was generated. This chart characterizes requests by subject and level of specificity. This data was then incorporated into the design of a prototype bibliographic record for the photographs in the collection.

A representative sample of records was generated and combined to produce a model full-text searchable index in ZyIMAGE system currently in place at the Ohio Historical Society. Each data file is treated as an individual document by the index, so the researcher is shown one discrete record for each image in the database. Reference staff members were invited to test and offer criticism of this prototype index. They were asked to browse the index, locate individual known images, and to request groupings of images of their own choosing. The goal of this research was to create a searchable index that is as intuitive and useful as possible for all current and future user groups.

CHAPTER IV.

RESULTS

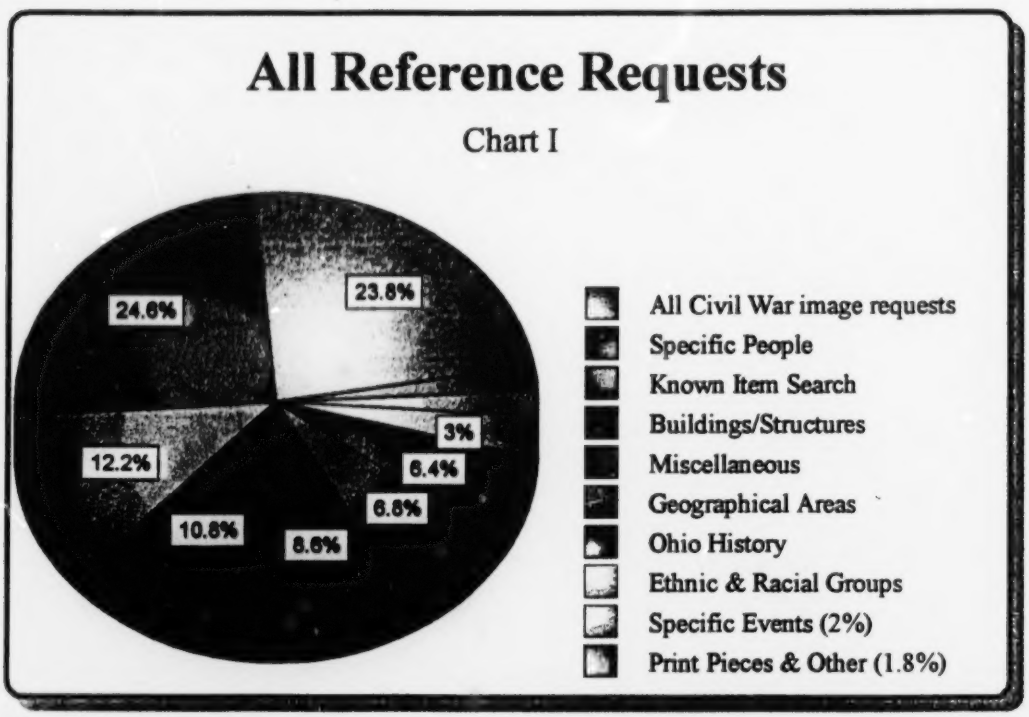
The purpose of this study is to develop a conceptual model for a collocating index that will provide a quick and easy one-source access to the Civil War photograph collection. These items are currently housed in different areas, and indexed with entirely different systems - some are card-based while others are electronic databases. There is simply not an effective method of determining the size or comparing the contents of these holdings at the Ohio Historical Society.

As a result of the literature review (see Chapter III), the author's personal experience as an OHS employee researching photographic reference requests over the past seven months, and invaluable input from Jennifer Songster, the OHS Audio-Visual Curator, a three-step process was mapped out. Step one was to chart reference requests from records of the Ohio Historical Society. Secondly, a model of bibliographic records for each item was created based on the information gleaned from step one, and from examining other graphic bibliographic models, such as the Library of Congress records for graphic materials. Finally, once these records had been fully researched and fine-tuned, they were loaded into a full-text indexing program, Zyindex, the system already in place in this facility.

Analysis of Reference Requests

First, a total of 768 reference requests was analyzed and charted. In this process, Civil War requests were tallied against the balance of all audio-visual reference requests (see Appendix A). This study covered a twenty-two month period from July 1995 through May of 1997. It was determined that the Civil War requests totaled 23.8% of all reference requests, or 183 total requests over this period. Estimates set the OHS photograph collection total at around 1,000,000

images. While the real number of images in the Civil War Collection is not known precisely, estimates place it somewhere in the 3,000 to 4,500 image range. It is quite apparent that a collection that represents less than .5% of the overall collection, but garners almost 24% (see Chart I) of the reference requests, should be given very special attention in regard to its indexing and cataloging.



All reference requests were also broken down by subject. It is necessary to understand how photographs are requested in a given institution, in order to determine which facets to incorporate into each record in order to most effectively match each request. Generally, it was found that in the Civil War requests, indeed all reference requests, were very specific. The most common request was for photographs of specific soldiers, which accounted for 38.8% of the Civil

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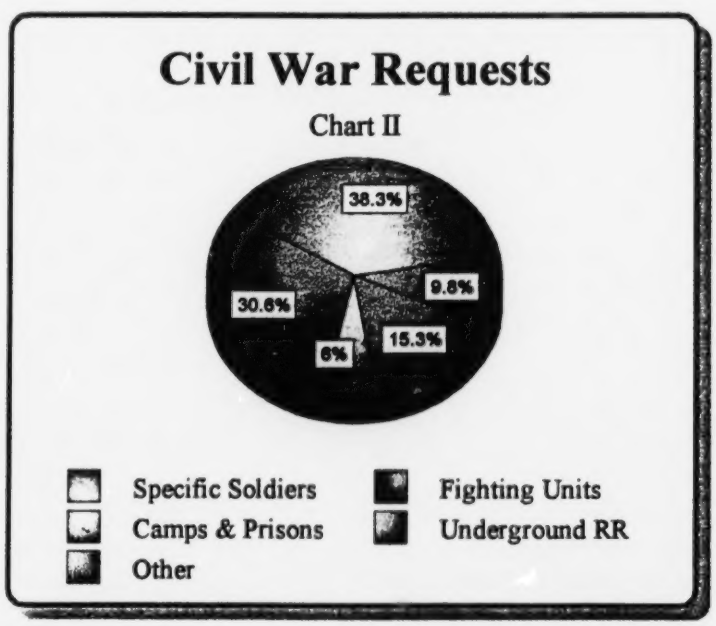
War category, or 70 requests. Further break-down of the specific soldier category indicates that 35 requests were for *officers*, 22 were for soldiers with no rank specified, and 13 were for enlisted men. The second most common request was by fighting unit, which accounted for 30.6% of the Civil War requests, or 56 requests. Examples of these requests included:

- anything from the 53rd Infantry Regiment
- photographs of anyone in Company C, 6th Ohio Cavalry
- the regimental flag of the 110th Regiment

The categories of specific soldiers and specific fighting units combined represents 69% of all Civil War related reference requests. The balance of the Civil War requests also contained some very specific requests, such as for images of specific abolitionists (11), Camp Chase (3), John Brown (3), Frederick Douglas (2), Johnson's Island (2), Camp Denison (1), and so on.



In all, only 11 requests, or 6%, could be considered generic or general requests. The vast

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majority, 94%, were very specific. (Note: refer to the balance of Appendix A for a complete break-down of the non-Civil War reference requests by subject).

The Bibliographic Record Model

The effectiveness of a photographic index is dependant completely upon the bibliographic record. It is quite simply the key to success or failure. The process of developing the information fields, or access points, for the bibliographical record model most relevant to this collection, was the principle focus of this project. Other essential record elements such as the lay-out and sequencing of fields presented additional challenges. At all points, primary consideration was given to the intended format, the Web index. Patrons searching for specific images expect fast and likewise specific results. The amount of detail and level of specificity represented in any bibliographic record must match as closely as possible the level of both in each patron request.

First, field identifiers (attributes) and contents (attribute values) had to be selected. Models considered included records used in several graphic databases and guidelines for Internet documents, most notably:

- University of Michigan Digital Library Project Art Image Database
- International Standard Bibliographic Description (ISBD) record format
- Dublin Core Metadata Element Set
- Bancroft Library's Japanese-American Evacuation and Resettlement Photograph Collection
- Library of Congress Prints and Photographs Division bibliographic records

While some elements from all these models were incorporated, the Library of Congress documentation offers the best model for the OHS Collection. The LC collection is more similar to the OHS collection because it also has a large Civil War photograph collection, and as such has had to confront many of the same indexing challenges. However, in order to most efficiently represent OHS holdings, the records developed in this study (see Appendix C for model records)

were modified in many ways from the LC Model. It was generally found, in the process of constructing these records, that "internal consistency and logic are much more compelling exigencies" (Benemann, 1994), than a strict adherence to Library of Congress practice. A field by field analysis follows which will reveal the similarities and departures from LC records.

Field I: CREATOR

The first departure is the obvious difference in scope of the two databases. LC records have to be interfiled with records of many other formats, and this condition necessitates a higher level of specificity in subject headings, along with broader field tags. For example, the first field that appears in the LC record is labeled the author field, a term that is generalized to represent authors of books, photographers, painters, composers, lithographers, and so on. The OHS database only represents items that are created by either photographers, graphic artists, illustrators, or printers. The field term *creator*, the person or persons responsible for the DNA of the work, was a better fit for this field in this context, so it was chosen over the Library of Congress term, *author*. In terms of field sequencing, the author field was selected to be initial field in this model, as it is in the LC records. This was a difficult choice, in light of the fact that the vast majority of searchers search by subject, not by the person or persons responsibility for the creation of the work. The temptation was great to place the TITLE field first, as it is undoubtedly the most useful for culling images in graphic records. The practice of listing the CREATOR field first however, is in line with one of the most essential cataloguing principles stated in the Paris Principles of 1961, that of recognizing the primacy of the personal author.

Field II: TITLE

The title field presents some special problems in the case of graphic records. The vast majority of the graphic images comprise this collection have no supplied title, that is, a title printed on the item. Additionally, few offer accompanying documentation. This necessitates the construction of a title by the cataloger. Consequently, a field named TITLE slightly misleading, but as other names proved even more misleading, the field name TITLE was retained. The Library of Congress catalogers generally include a line in the "notes" that reads, "title derived". The derived title is inclosed in square brackets, while a title from the item is not. Consequently, the "title" field is a combination of several elements: identifying the persons, units, locations, or battles depicted, and often a description of how they are arranged within the frame. For example, the derived title of a portrait of U.S. Grant is constructed the following way in a LC record:

> **[Ulysses S. Grant, full-length portrait, facing left, standing alongside his war horse, "Cincinnati"]**

This level of detail not only is a succinct description of the image contents, but may prove extremely useful in discriminating this particular image from the many other photographs of U. S. Grant.

This field generally requires more research than any other, because the most important subjects simply have to be identified and verified. To identify the most important subjects for the anticipated users of an index, the reference request tables need to be analyzed. In the OHS index it is clear from studying the nature of past reference requests, that our research efforts should be concentrated on identifying all people and fighting units depicted in the in our Civil War images. Secondarily, the geographic locations and other physical details could be identified.

In this project one major issue was how to treat hand-written captions either on the face

or the verso of the item. The majority of the photographs in the OHS collection come from private donors, so one would hope that the hand-written documentation found on the item reflects the primary-source perspective that provides the necessary authority for sound documentation. The problem often is that there is no way of determining just *who* wrote the captions, or *when*. Once again, the indexer needs to research the available sources (see appendix D for a list of Civil War Ohio reference books) to verify the information contained on the item. In reality, this hand-written text is often the only clue to the identity of the persons or events depicted in the photograph, and it should be regarded as the point-of-departure for further research.

Field III: DESCRIPTION

Although this field label is a little vague in terms of whether it represents a description of the contents of the image, or a physical description of the extent of the image, the field contents can quickly dispel the ambiguity. Quite simply, this field describes the physical details of the image. It corresponds to area 5 of the ISBD record-the extent of the item, and the standard physical description terms are well-represented in the Thesaurus for Graphics Materials II, the Genre and Physical Characteristic Terms. This format guide is simply the best available for uniform language to describe the various formats contained in a graphic collection. It is very detailed, offers syndetic references, cataloger and public notes, and was conceived with the stated purpose of effecting a terms match between the cataloger and the researcher. Ultimately, the OHS Web index would include a hyper-text link to the online version of the Thesaurus for Graphics Materials, to provide the researcher with both a subject and genre thesaurus of terms.

This field also contains data on dimensions of the item, constructed as specified in Anglo-American Cataloguing Rules, second edition, 1988 Revision, rule 8.5D. Essentially, the

dimensions are listed in centimeters, height first, followed by the width (see Appendix C for record details). This field serves as an aid to the identification of a specific or known item, while also offering the researcher an idea of the level of image resolution, based on its size and format characteristics.

Field IV: SUBJECTS

Another major departure from LC was the level of specificity of the subject headings used. Once again, all LC subject strings have to be interfiled with other formats, other wars, other topics, even works about other countries. The OHS index presents surrogates for items of a very narrow scope, that is, images of Ohio's part in the Civil War. An identical image would be represented quite differently in the LC record when compared with the OHS record. Consider the example of an image of unidentified Ohio soldier - in this example an enlisted man. It would be recorded in the Library of Congress record in this fashion:

United States -- History -- Civil War, 1861-1865 -- Soldiers -- Union -- Ohio.

This level of detail is quite necessary in the LC catalogue, due to its large size and varied contents. By contrast, in the OHS data base many of these layers are redundant. The identical image could be sufficiently represented as simply:

Soldiers -- Ohio.

This is, after all, a collection of Civil War images about Ohio, a Union state, and it can rightfully be assumed that these subjects are implied in every record, unless otherwise noted. This seems to the author to be common sense, and the researcher can be expected to intuitively grasp this treatment in the same way he or she would quickly learn the level of specificity of a back-of-the book index.

It was determined that the inclusion of the Library of Congress Name Authority Files (NAF) for all proper names would be very useful in an index that will be often queried for proper names. These files, now available online, provide the necessary level of detail for Ohio's long list of historical figures that figured prominently in the Civil War. These established headings include detail on the fullness of name (initials are spelled out), and birth and death dates (see Appendix C). Often the lesser known soldiers are not represented in the NAF, but whenever possible, it is beneficial for the indexer to construct their names in a similar fashion, that is, to provide a full name including birth and death dates. This can be accomplished with the help of the Official Roster of the Soldiers in the War of the Rebellion, and with any regimental history that may be available on the fighting unit that the subject was associated with. Because the Ohio Historical Society is the repository for materials on Ohio history, the collection provides tremendous reference capabilities. It would be difficult to imagine trying to accomplish the level of research necessary to represent this graphic collection in any other institution in the country.

Field V: COLLECTION

A field indicating a collection name was included for several reasons. A researcher may have past experience with a specific collection, so a Boolean search for, "Higby Family Photograph Collection" AND "Captain" could provide a hit even though the Captain's name is not known to the researcher. Certain collections may also be known for a certain level of technical quality, authoritative documentation, or even for representing a specific geographical area of Ohio, or specific Ohio military unit. These are all filtering tools that can be effectively used by the researcher.

In consideration of the fact that most OHS collections come from private donors, it is

good public relations to acknowledge the name of a given collection, as a tip-of-the-hat to the donor.

Field VI: LOCATION

One interesting element of item identification in a graphic collection, is that no universal classification system exists for photographs, unlike the well-established systems in place for textual materials. There is simply no substitute for a LC or Dewey Classification numbers that have proven invaluable for cataloguing, indexing, and shelving text-based materials. This situation presents the challenge of uniquely identifying each item. The graphic items in the LC catalog are listed in a field labeled "LC Call No.", but the attribute values found in this field are really more in the nature of locators than classification or call numbers. They include a combination of elements such as file location, proper names, and descriptive elements. Examples of the "LC Call No." field include:

- **Item in PRES FILE - Grant, Ulysses S.--in uniform--Photo--Three-quarter and full**
- **Illus. In AP2.H32**
- **Item in LOT 4192**
- **Item in BIOG FILE - Chase, Salmon Portland, 1808-1873**
- **DRWG/US - Lumley, no. 5**

The field contents are collection-specific, and obviously do not present any sort of universal standard. It seems that the P&P Division has several very large files, the PRES FILE or the BIOG FILE for example, in which items are filed by their appropriate LC Name Authority. It doesn't appear that items are always retained in their original collection, but have been separated and grouped in subject files. Images in the OHS collection, however, are housed differently in the four major collections:

SC Files: grouped by subject
P-Collections: groped by provenance
AP-Collection: grouped by format
OVS-Collection: grouped by size

The most appropriate common method of providing a call number for each item was to further narrow the existing collection number. Thus, a P-Collection item already labeled P220/6/4, can be uniquely identified by simply adding another numeric character at the folder level: P220/6/4/#1. Thus, the item in question can be readily understood as being held in collection P-220, box #6, folder# 4, item #1. Instead of labeling this field LC Call No., which is more than a little misleading because no such call number exists, this field in the OHS record is simply labeled LOCATION.

Field VII: COPYRIGHTS

The copyright field is included more as a disclaimer by the Ohio Historical Society. The blanket statement that is included in most of the images records reads:

> Copyrights have not been dedicated to the public. Consideration of the requirements of copyrights is the responsibility of the author and publisher.

In some of the collections, particularly the SC-Collection, documentation on copyright is not available. The above disclaimer is included more as a protective device for the historical society. Additionally, copyrights may vary from collection to collection, so it was thought best to list them for each item.

Field VIII: NOTES

This field is a valuable catch-all for providing additional descriptive and subject information that doesn't fit well in any other field. It is less structured, and the cataloger is given discression to add information that is deemed likely to be helpful to identifying either the uniqueness of an item, or its relation to other items.

In this field, the caption on the face is transcribed in quotes, as well as the text from the verso (see Appendix C). This treatment may help to mitigate any unsound conclusions drawn by the indexer in the process of using these hand-written elements to construct a derived title. In other words, the researcher can examine the text exactly as it appears on the item, and draw his or her own conclusions.

Field IX: CONTROL NO.

Once the item's location has been precisely represented, the last field, the Control Number, completes the record. This number is useful only to the institution, as its purpose is to simply to identify the division of LC (in this case the Prints & Photographs Division), and list a unique control number for the item or file that is being cataloged. In the OHS database, this field was used to provide a link from the item to the electronic record, to facilitate future record updates. It could also be utilized in the Web page in the photo duplication ordering process. This control number corresponds directly to the original file number, and as each file is considered a "document" by the index, is regarded as the bibliographic unit in this index.

SUMMARY

Once the bibliographic records had been fine-tuned, the next step was to generate an index and test it. It was not practical to post this index on the Web for public response due to restrictions from the Ohio Historical Society. All Web elements must be presented to a the OHS Web Committee. Decisions concerning which new elements to incorporate in its Web pages rest in its hands. As this process was beyond the scope and time frame of this project, it was not

attempted. It was, however, possible to generate an in-house index, and invite members of the reference staff to test and comment on this product. The results from these tests are included in the Chapter V, Testing and Subjects for Future Research.

CHAPTER V.

INDEX TESTING

A total of 31 images records were generated for the test index. These 31 text files were created by recording a MACRO to produce the fields in WordPerfect 7.0, entering in all appropriate data into the nine field outlined in Chapter IV, and saving these files as ASCII DOS Generic Word Processor (.txt) files. This file format was selected because the ZyIMAGE Web search engine outputs only flat text, in the form of ACSII-style text files. This is true of the ZyINDEX system no matter what the source, whether it be electronic data or scanned images that the ZySCAN software translates into .txt files in the Optical Character Recognition (OCR) process. This choice of file formats was deemed appropriate because it *works around* any possible text placement problems that occur with the use of indents and tabs that are software-specific.

The next step is to build an index in ZyBUILDi. The process of building this index is quite simple, and takes only a second or two for a database of this size. Two major considerations in the index building process include the generation of a stop word file (Zy calls it a noise word list), and a synonym list. Both of these critical lists are index specific, that is, a custom file is built by the indexer as this process develops.

ZyBUILDi supplies a generic noise word file that can be edited at the discretion of the programmer. This list includes many short words, adjectives, conjunctions, and unfortunately for this Civil War Index, all single characters, like "a" or "c". In an index that includes many items identified by character (Company "A" or Ulysses "S" Grant), it was necessary to exclude these characters from the stop list. The field names (CREATOR, DESCRIPTION, etc.) were added to this stop word list, with the intention of limiting the size and optimizing the operating speed of the

index. ZyBUILDi includes the noise list text file in the index folder, and it is a simple matter to edit it at any time. Of course, following all modifications, the index must be rebuilt.

For some inexplicable reason, the synonym list is not modified in ZyBUILDi, but rather in ZyFINDi, the index search software. After each synonym modification, the indexer must return to ZyBUILDi to rebuilt the index to include the newly constructed synonyms. This list is a very important element to the index. Every military rank appears in two, three, or possibly more forms, and the same is true of all fighting units. All synonym lists have to be constructed normally and conversely to cover all possible permutations of the forms. For example, the following list addresses the synonyms for the rank of sergeant:

First Permutation	Second Permutation	Third Permutation
Coreword: sergeant	Coreword: ser	Coreword: sergt
Synonym: ser	Synonym: seregeant	Synonym: ser
Synonym: sergt	Synonym: sergt	Synonym: sergeant

This treatment is necessary for all fighting units (O.V.I = OVI = Ohio Volunteer Infantry), and all other index terms that have possible synonyms that could derail the record retrieval process. Synonym identification is of primary importance in helping the researcher to successfully match the language contained within the catalogue records. After all, and electronic index actually performs just one very simple task, it matches words and characters in the index, with the words and characters supplied by the researcher. The building of a synonym list is a continuing process that evolves throughout the duration of the record and index creation process.

Index Testing

Five reference librarians from the Ohio Historical Society were invited to test this small index. The response from all five was a unanimous, *"how soon can this index be completed!?!"* This response is indicative of just how badly this index is needed at OHS. They often had to be reminded to be critical for the betterment on the index model. They all seemed pleased with the record lay-out, and proceeded with logic and determination when they got unexpected results. They were encouraged to browse and to search for known items provided by the writer. Overall impressions were uniformly positive.

Technically, several interesting factors were revealed. The use of any punctuation in the search string will completely void the search. For example, one librarian searched for a known item (a photograph of Charles K. Crumit) with the following search string:

"Charles K. Crumit"

This search yielded no hits, and we were both perplexed because we were looking at a print-out of the record, which the above string matched exactly. We then deleted the period after the initial K, and the record was retrieved as expected. ZyINDEX ignores all punctuation that is followed by a space, but it "sees" punctuation that has characters on both sides of it. Thus, it sees the period in "CWI09.txt", but not in "Charles K. Crumit".

The order of the name entry also caused some problems. In the DESCRIPTION (field #2) the soldier's name is always entered in direct order, "Charles K Crumit", but in the SUBJECTS fields, it is entered in inverted order, in keeping with the Library of Congress Name Authority File practice. If an experienced searcher enters a name in inverted order, "Crumit Charles", and the name appears only in the DESCRIPTION field, he will get no hits. To avoid this problem, the

indexer determined that all names should appear in both fields, to make name entry order as transparent as possible for the searcher.

The testing performed on this index was limited, but it provided valuable data for index and record customization. The goal was to identify index problems and ambiguities before the generation of large quantites of records made large scale record modification cost-prohibitive.

Subjects for further research

Several research possibilities are suggested by the initial phases of the index creation.

1. Considering the amount of research required to generate each record, a valuable research project would be to create records of at least a third of this or a similar collection, and from this extrapolate the average time needed to create each record. It was difficult with the scope of this project to accurately estimate this critical element. With a tested time unit per image, it would be a possible to accurately estimate the time needed to catalogue an entire collection.

2. It would be very important to field test this index via the Web, with searchers from the public. Their search habits vary widely from the very sophisticated reference staff, and the resulting data would be equally valuable for record and index customization.

3. Once this index is operational, it is assumed that the Audio-Visual Section would see an increased business in the area of reference requests and photograph orders. Valuable research at this stage could serve to quantify this increase in business. For example:

- Would the existing photo reproduction staff be sufficient to handle increased demands?
- Would it be prudent to store all scanned documents as requested against future orders?
- If so, what increases in computer speed and storage capabilities should be considered?
- What uses could this increased revenue be used for?

Appendix A

Reference Requests: Ohio Historical Society Audio-Visual Section, July 1995 - May 1997

I. Civil War Images

Category	Reference Requests	Number	Format	% of Total Civil War Requests	% of Total Reference Requests
Soldiers					
	Specific soldiers: Officers	35	P		
	Specific soldiers (rank not specified)	22	P		
	Specific soldiers: enlisted men	13	P		
		70		**38.3%**	**9.1%**
Fighting Units					
	Requests by Regiment	27	P		
	Requests for specific regimental flags	24	P		
	Requests by Regiment & Company	4	P		
	Requests by battles fought	1	P		
		56		**30.6%**	**7.3%**
Civil War Camps & Prisons					
	Camp Denison	1	P		
	Camp Chase	3	P		
	Other camps	4	P		
	Johnson's Island	2	P		
	McLean Barracks	1	P		
		11		**6.0%**	**1.4%**
Underground Railroad/Abolition					
	Specific abolitionists	11	P		
	Underground railroad	7	P		
	Specific Underground Railroad stations	2	P		
	Former slaves	1	P		
	John Brown	3	P		
	John Brown's father	1	P		
	Frederick Douglas	2	P		
	Black soldiers	1	P		
		28		**15.3%**	**3.6%**
Other					
	Carpetbaggers	1	P		
	Lincoln funeral train car	1	P		
	Specific Steamboats used as troop carriers	3	P		
	Officer's wives/families	2	P		
	Ohio State House in the 1860s	1	P		
	Officer's homes/birthplaces	1	P		
	Firearms & accouterments	1	P		
	Ohio cities in the Civil War era	2	P		
	Civil War railroad stations	2	P		
	Civil War politicians	2	P		
	Known Civil War photographs	2	P		
		18		**9.8%**	**2.3%**
Total Civil War		**183**			**23.8%**

Appendix A

Reference Requests: Ohio Historical Society Audio-Visual Section, July 1995 - May 1997

II. Non Civil War Reference Requests

Category	Reference Requests	Number	Format	% of total non-Civil War requests	% of total reference requests
Specific People					
	Specific persons	106	P		
	Specific politicians (includes Ohio presidents)	59	P		
	Specific Afro-Americans	5	P		
	Specific Native American Tribes	4	P		
	Specific Native Americans	3	P		
	Laddie Boy: President Harding's dog	2	P		
	Warren G. Harding with wife	1	V/F		
	Specific athletes	2	P		
	R.B. Hayes on the telephone	1	P		
	Jesse Owens Interview	1	A		
	Pretty Boy Floyd: funeral parlor photos	1	P		
	Specific families	1	P		
	Presidents from Ohio	1	P		
	Farmers	1	P		
	Ohio Agricultural Department Directors	1	P		
		189		**32%**	**24.6%**
Geographic areas					
	Specific cities & towns	22	P		
	Towns in specific counties	5	P		
	Rural Ohio	4	P		
	Specific neighborhoods	4	P		
	Scenic river scenes	1	P		
	Oberlin, Ohio	1	V/F		
	Aerial photograph: Columbus	1	P		
	Columbus at turn of century	2	V/F		
	Early shots of OSU campus	1	V/F		
	Early Columbus street scenes	1	P		
	Cincinnati riverboats 1850s	1	P		
	Specific county: farm photos	1	P		
	Aerial photograph: Greene County	1	P		
	Specific county: Industrial photos	1	P		
	Generic city streets 1920s	1	P		
	Specific natural areas	1	P		
	Put-in-Bay	1	P		
	Summit County WPA projects	1	P		
	Natural features of the Whittier Peninsula	1	P		
	Caesar Creek Lake	1	P		
		52		**9%**	**6.8%**
Buildings/structures					
	Specific buildings	39	P		
	Ohio president's homes	7	P		
	Ohio Pen photographs	3	P		
	Cedar Point	3	P		
	Crystal Beach Amusement Park	1	P		
	Silver Lake Amusement Park	1	P		
	Ohio Stadium	1	P		

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Reference Requests: Ohio Historical Society Audio-Visual Section, July 1995 - May 1997

	Neil Farm (OSU)	1	P		
	Specific railroad depots	2	P		
	Specific train trestle	1	P		
	Columbus Union Station	2	P		
	Crowded Columbus hospitals	1	P		
	Crowded Port Columbus airport	1	P		
	Early-American bridge types	1	P		
	White Castle restaurant parking lot	1	P		
	Cleveland Public Square	1	P		
	Cleveland Playhouse	1	P		
	Ohio State House	1	Ambrotype		
	Pre-1900 iron or wood bridge trusses	1	P		
	Mission for the Friendless	1	P		
	Institution for the feeble-minded	2	P		
	Farms	1	P		
	Old Indian villages	2	P		
	Horse-drawn school buses	1	P		
	Schools	1	P		
	Old barns	1	P		
	Hoover Dam construction	1	P		
	Specific covered bridges	1	P		
	Columbus jewelry stores	1	P		
	Pool halls	1	P		
	Interior of a 19th century photo studio	1	P		
		83		**14%**	**10.8%**
Ethnic, Racial, and Regional Groups					
	Blacks voting (Cleveland)	1	P		
	Blacks & Indians meeting	1	P		
	Bibliography of Black history sources	1	A		
	Women's Liberation Movement: 1960-70s	1	V/F		
	Battered women footage	2	V/F		
	Commuting sentence of women on death row	1	V/F		
	Women's roles in the Western Expansion Mvt.	1	P		
	All-women trans-American air race	1	P		
	Eastern European immigrants	1	P		
	Immigrant groups (families)	1	P		
	Amish	1	P		
	Amish barn-raising	1	V/F		
	Shaker lifestyle	1	P		
	Appalachian culture	1	V/P		
	Jewish reform movement	1	V/F		
	Inter-racial couple in Marion, 1950s	1	P		
	Indians taking census (1900-1910)	1	P		
	Indian council meeting	1	P		
	Indian Medicine Man	1	P		
	Indians standing in rays of sunlight	1	P		
	Indians getting haircut	1	P		
	Images of Indians & corn together	1	P		
		23		**3.9%**	**3.0%**

Appendix A

Reference Requests: Ohio Historical Society Audio-Visual Section, July 1995 - May 1997

Other					
	UFOs	1	V/F		
	Night shot of a four-lane highway, 1950s	1	V/F		
	Cleveland's purple gang (bootleggers)	1	V/F		
	Sam Shepard wrestling	1	V/F		
	High School basketball tournament games	1	V/F		
	1972 state wrestling finals	1	V/F		
	Industrial softball leagues	1	V/F		
	W.W.II PT boat	1	V/F		
	Model T car crashes	1	V/F		
	Early auto racing in Ohio	1	V/F		
	Early automobiles	1	P		
	Westcott cars	1	P		
	Manufacturing processes	1	V/F		
	Preparing flax	1	V/F		
	Harvesting flax	1	V/F		
	Harvesting & preserving food	1	V/F		
	Recreation: Indian Lake	1	V/F		
	Political campaign commercial	1	V/F		
	People watching Glenn's first space flight	1	V/F		
	Manufacturing processes	1	V/F		
	Someone tap dancing on the Jack Shirek Show	1	V/F		
	Singing group: "the 4 Mints"	1	V/F		
	Video dealing with drugs	1	V/F		
	Social & legislative history of marijuana	1	V/F		
	Interstate highway with trucks	1	V/F		
	"Welcome to Ohio" road sign (1950s)	1	V/F		
	Gasline/pipeline break	1	V/F		
	Small-town truck accident w/hazardous waste	1	V/F		
	Hazardous waste accidents	1	V/F		
	Chemical plant explosion on waterway	1	V/F		
	Explosions	1	P		
	Tornadoes	1	V/F		
	Images of western expansion	1	P		
	Columbus businesses	1	P		
	Baseball bat factory in Milan, Ohio	1	P		
	Roseville Pottery	1	P		
	United Verde Copper Company	1	P		
	Lustron Corporation factory scenes	1	P		
	Mining machinery	1	P		
	Plant lay-offs	1	P		
	Presidential coins	1	P		
	Specific tree: Centennial Oak	1	P		
	Images with a corn motif	1	P		
	Images of "coach lace" used in railroad cars	1	P		
	Electric railways	1	P		
	Specific railroad companies	1	P		
	Headlight of a C & O Railroad Engine	1	P		
	Technology in the 20th century	1	P		
	Mechanical television	1	P		
	Wine-making in Ohio	1	P		
	Early washing machines	1	P		
	Early radio shows	1	A		

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Reference Requests: Ohio Historical Society Audio-Visual Section, July 1995 - May 1997

	Early crystal radio	1	P		
	Premier of a specific motion picture	2	P		
	Circus trains	1	P		
	Table settings/people eating	1	P		
	Boards of women managers	1	P		
	A Side chair (1840-50)	1	P		
	Furniture images (History)	1	P		
	Roll-top desk	1	P		
	Images of specific decades (I.e. 1960s)	1	P		
	1900s office	1	P		
	1930s office scene	1	P		
	1950s photocopier	1	P		
	Marching bands	1	P		
		66		**11.3%**	**8.6%**
State Government					
	House sessions	1	V/F		
	Interiors of the Ohio General Assembly	1	P		
	House of Representatives calendar	1	P		
	1912 state primary images	1	P		
	State House Activities	1	P		
		5		**0.9%**	**0.7%**
Known Items					
	Prints of known photographs	39	P		
	Known engravings/paintings/illustrations	16	P		
	Known films	12	V/F		
	Known maps in OHS collection	7	P		
	Image of "Mastodon butchery" OHS display	1	P		
	Known images from "Timeline"	4	P		
	Specific newspaper headlines	2	P		
	Known newspaper page	1	P		
	Known image from newspaper	1	P		
	Known collection: ID images	1	P		
	Engravings of Amos Doolittle	1	P		
	Handbook: "Riots near White Castles"	1	P		
	Etching of Worcestor Lunatic Asylum	1	P		
	ID Known photographs	5	P		
	ID persons depicted in "Greenville Treaty"	1	P		
	ID location of a Columbus photograph	1			
		94		**16.1%**	**12.2%**
Ohio History					
	Archaeological artifacts (Ohio)	20	P		
	Mica objects (archaeological artifacts-Ohio)	1	P		
	Buckeye Furnace (OHS site)	1	P		
	Serpent Mound	1	P		
	Life in Ohio: 1750-1800	1	P		
	Images of Franklinton	1	P		
	Sniper training camp (Camp Perry)	1	P		
	W.W.II: Lucky Strike Camp	1	P		
	Suffrage/prohibition movements	1	P		
	Images of the pioneering experience	1	P		
	Laying telephone cable	1	P		
	Canal scenes	2	P		
	Travel in the 1830-40s	1	P		

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Reference Requests: Ohio Historical Society Audio-Visual Section, July 1995 - May 1997

	Taverns or Inns from the 1830s	1	P		
	Ohio forts	1	P		
	Specific memorials	1	P		
	Historic Ohio documents	1	P		
	Specific military camps	1	P		
	Highway construction (1910-30)	1	P		
	Battle of Fallen Timbers	1	P		
	Fort Meigs: War of 1812	1	P		
	W.W.II housing: Blennerhasset Island	1	P		
	Steamboats	3	P		
	Steamboat workers	1	P		
	Historic water uses (mills, transportation, etc.)	1	P		
	Battle of Lake Erie	1	P		
	Videos about Ohio History	1	V/F		
		49		**8.4%**	**6.4%**
Posters/broadsides/ cartoons/maps					
	W.W.I wheat production posters	1	P		
	Nautical map of Lake Erie	1	P		
	Pre-1900 Ohio maps	1	P		
	Horehound candy: advertising cards	1	P		
	Specific poster: railroads	1	P		
	Women's suffrage materials	1	P		
	Specific cartoons: prohibition	2	P		
	Cartoons of presidents	1	P		
		9		**1.5%**	**1.2%**
Events					
	Ohio State Fair	8	P		
	1924 Republican National Convention (Cleveland)	1	P		
	McKinley inauguration parade	1	P		
	Dayton flood 1913	1	P		
	1913 flood	1	P		
	W.W.I Armistice celebration	1	P		
	McKinley inauguration: Black Horse Troop	1	P		
	Ohio Exposition	1	P		
		15		**2.6%**	**2.0%**
II. Total non-Civil War Reference Requests		**585**			**76.2%**

Total reference requests charted	**768**

Format Key:

P - Photograph

V/F - Video or motion picture

A - Audio tape

Appendix B
Information Only Requests July 1995 - May 1997

Information Requests	Number	% of Total Information Requests
Permission to use OHS materials	27	45.00%
Requests to waive use fees	2	3.333%
Thank-yous...	2	"
Order form requests	2	"
Information about a specific OHS collection	2	"
Oral history transcript	1	1.67%
Copy of a film collection finding aid	1	"
Information on "Puck" (periodical)	1	"
Information on scanning duplication service	1	"
Copy of a printed forms of photographic services	1	"
Projected availability of un-processed collection	1	"
MSS materials of John Brown	1	"
Request for back invoices	1	"
Information on SOA & MAC conferences	1	"
Verify OHS entry in soon-to-be-published reference book	1	"
LC surveys - TV shows in archives	1	"
View drawings online?	1	"
Lists of cartoon collections	1	"
Cost to photograph an entire collection of sketches	1	"
Was the Broad Street Bridge lit before 1913?	1	"
Cost to photograph known map	1	"
Notice of a John Brown daguerreotype for sale	1	"
Information on displaying & selling OHS photographs at the OSU Faculty Club	1	"
Information on photo reproduction policies from other institutions	1	"
Details on speaking engagement	1	"
Information on dating old photographs	1	"
Information on public domain film footage	1	"
Information on small college archives	1	"
Information on delivering images digitally	1	"
Information on ordering original photography of OHS materials	1	"
Total Information only requests	**60**	

Appendix C
Sample Records

CREATOR
Keenan's Gallery, 118 West Fourth St., Cincinnati, O.

TITLE
[Three-quarter portrait of Adjutant William Blackford Stephenson, 1840-1879]

DESCRIPTION
1 photoprint : albumen, 10 x 6 cm. (Carte de visite)

SUBJECTS
Military officers -- Ohio
Ohio Infantry, 53rd Regiment

COLLECTION
Higby Family Photograph Collection

LOCATION
P20/1/6

COPYRIGHTS
Copyrights have not been dedicated to the public. Consideration of the requirements of copyrights is the responsibility of the author and publisher.

NOTES
verso: "Camp Denison/March 7th, 1864/Adj Stephenson/53rd Reg com"

CONTROL NO.
CWI01.txt

CREATOR
unknown

TITLE
[Group portrait of 20 officers of the 82nd O.V.I., posing on steps of a building]

DESCRIPTION
Silver-gelatin print, 12 x 16 cm.

SUBJECTS
Ohio infantry, 82nd Regiment
Military officers -- Ohio

COLLECTION
F. & R. Lazarus Photographic Collection

LOCATION
P92/11/#213

COPYRIGHTS
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NOTES
verso: "82nd O.V.I."

CONTROL NO.
CWI02.txt

CREATOR
Gurney & Son, Fifth Ave., N.Y.

TITLE
[Portrait of General George H. Thomas]

DESCRIPTION
Cabinet photograph ; 17 x 11 cm.

SUBJECTS
Military officers -- Ohio -- Generals -- Military service
Thomas, George Henry, 1816-1870

COLLECTION
John H. Klippart Family Collection

LOCATION
P157/1/3

COPYRIGHTS
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NOTES
verso: "Gen. Thomas"

CONTROL NO.
CWI03.txt

CREATOR
J.D. Fowler & Co., Opposite U.S. Naval Academy, Newport, R.I.

TITLE -
[Three-quarter portrait of Lt. Cyrus W. Breed]

DESCRIPTION
Albumen print ; 10 x 6 cm. (Carte de visite)

SUBJECTS
Military officers -- Ohio -- Navies -- Military service
Portrait photographs--1860-1870

COLLECTION
Higby Family Photograph Collection

LOCATION
P20/1/6

COPYRIGHTS
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NOTES
"Lt. Cyrus Breed"

CONTROL NO.
CWI05.txt

CREATOR
unknown

TITLE
[Group full-length portrait of the General Officers of the Second Division, Fifteenth Army Corps: General William B. Hazen, General John Morrison Oliver, General Wells S. Jones, and General Theodore Jones]

DESCRIPTION
Albumen print ; 10 x 6 cm. (Carte de visite)

SUBJECTS
Military officers -- Ohio -- Generals -- Military service
Hazen, William Babcock, 1830-1887
Oliver, John Morrison, 1828-1872
Jones, Wells S.
Jones, Theodore
Ohio infantry, 53rd Regiment
Ohio infantry, 30th Regiment

COLLECTION
Higby Family Photograph Collection

LOCATION
P20/1/6

COPYRIGHTS
Copyrights have not been dedicated to the public. Consideration of the requirements of copyrights is the responsibility of the author and publisher.

NOTES
"Gen. Officers 2d Div 15 A.C."
verso: "1 Gen Hazen/2 Gen Oliver/3 Gen W.S. Jones/ Gen Theo Jones"

CONTROL NO.
CWI08.txt

CREATOR
unknown

TITLE
[Three-quarter length portrait of General John Morrison Oliver, right hand in jacket]

DESCRIPTION
Albumen print ; 10 x 6 cm. (Carte de visite)

SUBJECTS
Military officers -- Generals -- Michigan -- Military service
Oliver, John Morrison, 1828-1872

COLLECTION
Higby Family Photograph Collection

LOCATION
P20/1/6

COPYRIGHTS
Copyrights have not been dedicated to the public. Consideration of the requirements of copyrights is the responsibility of the author and publisher.

NOTES
"J. M. Oliver"
verso: "J. M. Oliver/Brigadier Gen. Comdy 2nd Div/15th A.C."

CONTROL NO.
CWI09.txt

CREATOR
unknown

TITLE
[Portrait of Major Ephraim Cutler Dawes]

DESCRIPTION
Albumen photograph ; 10 x 6 cm. (Carte de visite)

SUBJECTS
Casualties
Dawes, Ephraim Cutler, 1841-1895
Ohio infantry, 53rd Regiment
Military officers -- Ohio

COLLECTION
Higby Family Photograph Collection

LOCATION
P20/1/6

COPYRIGHTS
Copyrights have not been dedicated to the public. Consideration of the requirements of copyrights is the responsibility of the author and publisher.

NOTES
Photograph shows the jaw reconstruction done after Major Dawes was wounded by a Confederate minnie ball on May 28, 1864
Photograph taken in June or July, 1864
verso: "Maj. Dawes _____/May 13, 1864/Died April 23rd, 1895"

CONTROL NO.
CWI14.txt

Appendix D
Bibliography of Civil War Ohio Reference Books

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